Separation of Variables

Quiz: Separation of Variables.

What is the general solution to the ODE dy/dx = 2y + 1? (Use separation of variables.)

Choices:

a)
$$y = Ce^{2x} - 1$$
.

b)
$$y = Ce^{x/2} - 2$$
.

c)
$$x = y^2 + y + C$$
.

d)
$$y = e^{x/2} + C$$
.

e)
$$y = Ce^{2x} + 1$$
.

f)
$$y = Ce^{2x} - 1/2$$
.

g)
$$y = e^{2x} + C$$
.

h) None of the above.

Pick what you think is the correct choice and then look at the answer.

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